MOH/P/PAK/389.18

GENERAL SURGICAL SERVICES OPERATIONAL POLICY

MEDICAL DEVELOPMENT DIVISION
Ministry of Health Malaysia
2018

MEDICAL DEVELOPMENT DIVISION
MINISTRY OF HEALTH MALAYSIA

2018

GENERAL SURGICAL SERVICES OPERATIONAL POLICY

Coordinated by:
Surgical and Emergency Medicine Services Unit
Medical Services Development Section
Medical Development Division
Ministry of Health Malaysia

www.moh.gov.my

MOH/P/PAK/389.18 (BP)

ISBN 978-967-2173-12-0

Published by:
Surgical and Emergency Medicine Services Unit,
Medical Services Development Section of Medical Development Division of Ministry of Health Malaysia and
The Drafting Committee of General Surgical Services Operational Policy

A catalogue record of this document is available from the
Library Block E7, Resource Unit Block E1
Ministry of Health Malaysia

Institute for Medical Research
Ministry of Health Malaysia

National Library of Malaysia

Softcopy of the document is available at www.moh.gov.my

Limitation:

There are many variations in the design, location, facilities, support services and the presence or absence of subspecialty services in the hospitals managed by the Ministry of Health Malaysia. There are also variations in human resource providing the general surgical services located in these hospitals in terms of numbers, level of experience, training and capability. There are numerous factors accounting for these variations.

The operational policies are practices which should be within the capability of most hospitals. The policy outlined in this document is for the surgical services, Ministry of Health Malaysia. Efforts will be made by all those concerned with planning, operational activities and evaluation of such services to ensure that the majority of hospitals would be able to adhere to these policies and standards. Hospitals will continue to be accountable for all the services that they provide in good faith for the benefit of the patients that they serve.

ACHIEVING EXCELLENCE IN GENERAL SURGICAL SERVICES

Framework document and companion guide for provision of safe, quality and patient-centered services

TABLE OF CONTENTS

TABLE OF CONTENTS

Section III. Subspecialty and specialty services

Section IV. Appendices

TABLE OF CONTENTS

Section V. List of procedures

FOREWORD
DIRECTOR GENERAL OF HEALTH MALAYSIA

Malaysia is proud of the strong foundations laid since independence in providing surgical services.

We have now entered the consolidation phase of quality improvement activities and our emphasis is on patient safety rather than just an outcome based approached in our thrust towards patient centered care and services.

Operational policies are imperative therefore in ensuring a uniform delivery of quality services.

I am pleased that this operational policy conforms to the highest international and national standards of hospital accreditation bodies. We must always strive for excellence and I congratulate the team that has developed this operational policy, for leading the way in conforming to international standards.

I hope this Operational Policy of General Surgical Services of Malaysia will form another milestone in the advancement of subspecialties in Malaysia

YBhg Datuk Dr Noor Hisham bin Abdullah
Director General of Health, Malaysia

PREFACE
CHAIRMAN OF GENERAL SURGICAL SERVICES OPERATIONAL POLICY

The preparation of the General Surgical Services Operational Policy was started after the Annual Heads of Surgery meeting in 2016. It is to serve as a guide to Heads of General Surgical Departments in the Ministry of Health in their day to day administration and conduct of professional duties.

It contains general outlines of scope of services provided, our direction and requirement for good governance. Categorisation of hospitals according to Surgical bed strength has been made to facilitate comparison of staff strengths and workload for planning purposes.

This document has highlighted Practice Points and Pitfalls to address areas that need special attention.Current solutions to some outstanding and contentious problems with other related disciplines has been included. Examples of this are the `Negotiated List' and the 'Management of patient with peripheral vascular complication requiring amputation'. Some relevant policies which are common to all disciplines have also been included with their corresponding references.

This document is the first for the General Surgical fraternity. It would not have been possible without the input from all those involved including the Specialty and Subspecialty Heads of Service. A special word of thanks to Dr. Patimah Amin and her team for their tireless effort in making this document a reality.

As with all policy documents, it shall be reviewed.

YBhg Dato' Dr Abdul Jamil bin Abdullah
Senior Consultant General Surgeon

Message from the National Head of General Surgical Service

Over the years, Surgical Services in the Ministry of Health Malaysia has expanded in terms of facilities and scope of services provided.
General Surgical Services are provided by the general surgeons and the sub specialists.

The healthcare facilities also vary from one extreme of non-specialist hospital to tertiary hospitals with subspecialist. With the diversity of workforce providing the similar scope of services, variations in terms of process of care are inevitable with resultant disparity in quality of care between facilities. The Lancet Commission on Global Surgery in their report Global Surgery 2030, has five key messages which highlights indicators that should be measured to assess quality of surgical care.

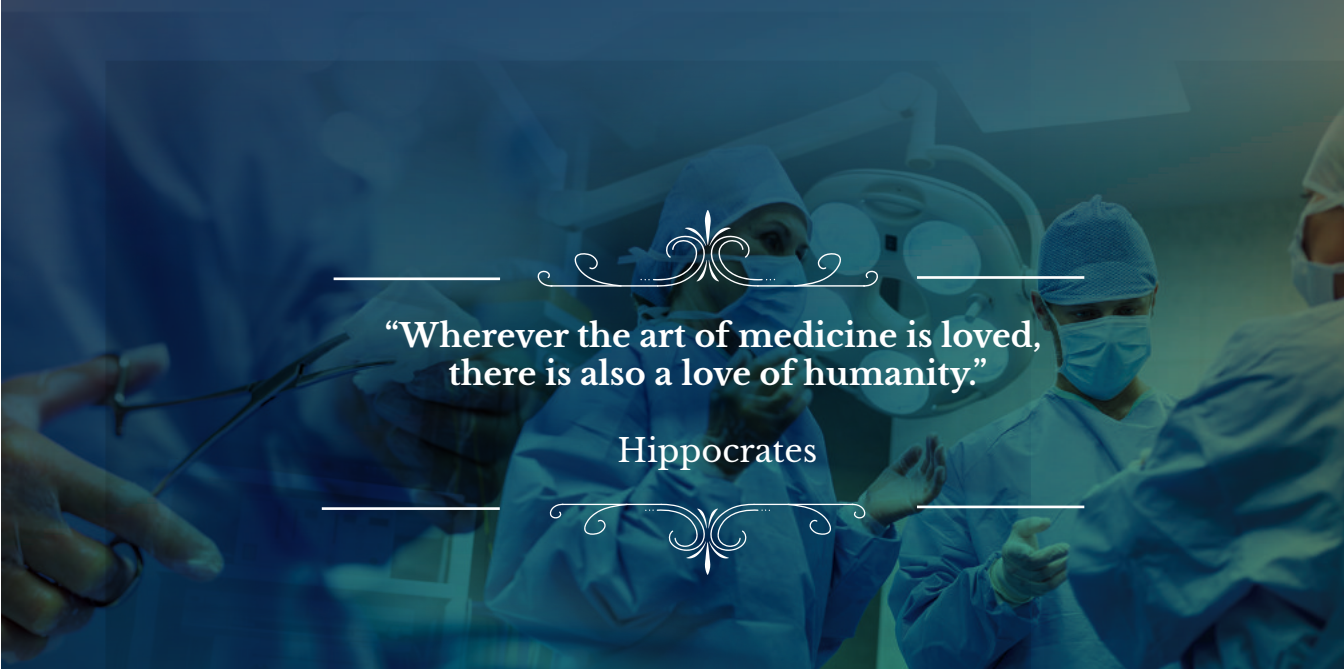
During the Ministry of Health Malaysia Surgeons Annual Meet in 2017, the need for a surgical policy was endorsed, with the intention of streamlining surgical services. This policy document draws the guidelines for general surgical services which include subspecialties under general surgery, which are Breast and Endocrine, Upper Gastrointestinal, Hepatopancreatobiliary, Colorectal, Thoracic, Vascular and Trauma. Basic Paediatric Surgery procedures and Neuro Trauma Surgery procedures are also covered in this policy.

It is hoped that with this policy document, the variations in delivery of care would to a certain degree be narrowed. The heads of all surgical departments are expected to review their current practises and ensure that this policy is adhere to. This policy will be reviewed in year 2023 and updated if necessary with the latest developments and progress in surgical care.

YBhg Dato' Seri Dr Mohamed Yusof bin Haji Abdul Wahab
National Advisor of General Surgical Services

SECTION I

Editorial board & Contributors



"Wherever the art of medicine is loved, there is also a love of humanity."

Hippocrates

EDITORIAL BOARD

CHIEF ADVISOR

Dato' Dr Haji Azman bin Haji Abu Bakar
Deputy Director General of Health (Medical)

ADVISORS

Dato' Dr Haji Bahari bin Dato' Tok Muda Haji Che Awang Ngah
Director
Medical Development Division

Dr Ahmad Razid bin Salleh
Director
Medical Practise Division
Medical Development Division

Datin Sri Dr Asmah binti Samat
Senior Principal Assistant Director
Medical Development Services Section
Medical Development Division

Dr Mohd Fikri bin Ujang
Senior Deputy Director
Medical Professional Development Section
Medical Development Division

Dr Paa Mohamed Nazir bin Abdul Rahman
Senior Deputy Director
Medical Care Quality Sector
Medical Development Division

Dr Patimah binti Amin
Senior Principal Assistant Director
Surgical and Emergency Medicine Services Unit
Medical Development Division

Dr Laili Murni binti Mokthar
Senior Assistant Director
Hospital Management Services Unit
Medical Development Division

EDITORIAL BOARD

CHAIRMAN

Dato' Dr Abdul Jamil bin Abdullah
Senior Consultant General Surgeon
Hospital Sultanah Nur Zahirah,Terengganu

MEMBERS OF DRAFTING COMMITTEE

Dato' Seri Dr Mohamed Yusof bin Haji Abdul Wahab
Senior Consultant General Surgeon
Hospital Tengku Ampuan Rahimah, Klang

Dato' Dr Jiffre bin Din
Senior Consultant General Surgeon
Hospital Tengku Ampuan Afzan, Kuantan

Dato' Dr Wan Khamizar bin Wan Khazim
Senior Consultant General and Colorectal Surgeon
Hospital Sultanah Bahiyah, Alor Setar

Dato' Dr Nik Mohamad Shukri Nik Yahya
Senior Consultant General Surgeon
Hospital Raja Perempuan Zainab II, Kota Bharu

Datuk Dr Muhammad Safian bin Naim
Senior Consultant General Surgeon
Hospital Melaka

Dato' Dr Fitjerald Henry
Senior Consultant General and Colorectal Surgeon
Hospital Selayang

Dr Nor Aina binti Emran
Senior Consultant General and Breast and Endocrine Surgeon
Hospital Kuala Lumpur

Dr Yan Yang Wai
Senior Consultant General Surgeon
Hospital Raja Permaisuri Bainun, Ipoh

EDITORIAL BOARD

CONTRIBUTORS

Datuk Dr Zainal Ariffin bin Azizi
Senior Consultant Vascular Surgeon
Hospital Kuala Lumpur

Dato' Dr Jahizah binti Hassan
Senior Consultant Cardiothoracic Anesthesiology and Perfusionist
Hospital Kuala Lumpur

Dato' Dr Zakaria bin Zahari
Senior Consultant Paediatric Surgeon
Hospital Kuala Lumpur

Dato' Dr Johari Siregar bin Adenan
Senior Consultant Neurosurgeon
Hospital Kuala Lumpur

Dr Lim Shyang Yee
Senior Consultant General and Upper Gastrointestinal Surgeon
Hospital Pulau Pinang

Dr Manisekar Subramanian
Senior Consultant General and Hepatopancreatobiliary Surgeon
Hospital Sultanah Bahiyah, Alor Setar

Dr Rizal Imran bin Alwi
Senior Consultant Trauma and Burn
Hospital Sultanah Aminah, Johor Bharu

Dr Praveen Nadarajah
Senior Medical Officer
Department of General Surgery
Hospital Tengku Ampuan Rahimah, Klang

Dr Thee Li Jie
Senior Medical Officer
Department of General Surgery
Hospital Tengku Ampuan Rahimah, Klang

Dr Faizah binti Muhamad Zin
Senior Principal Assistant Director
Head of Clinical Audit Unit
Medical Care Quality Section
Medical Development Division

POMR Drafting Committee Members
Ministry of Health Malaysia

SECRETARIATS

Dr Zahirah binti Juraimi
Senior Principal Assistant Director
Surgical and Emergency Medicine Services Unit
Medical Development Division

Dr Abdul Hakim bin Abdul Rashid
Senior Principal Assistant Director
Surgical and Emergency Medicine Services Unit
Medical Development Division

Dr Umawathy Sundrarajoo
Senior Principal Assistant Director
Surgical and Emergency Medicine Services Unit
Medical Development Division

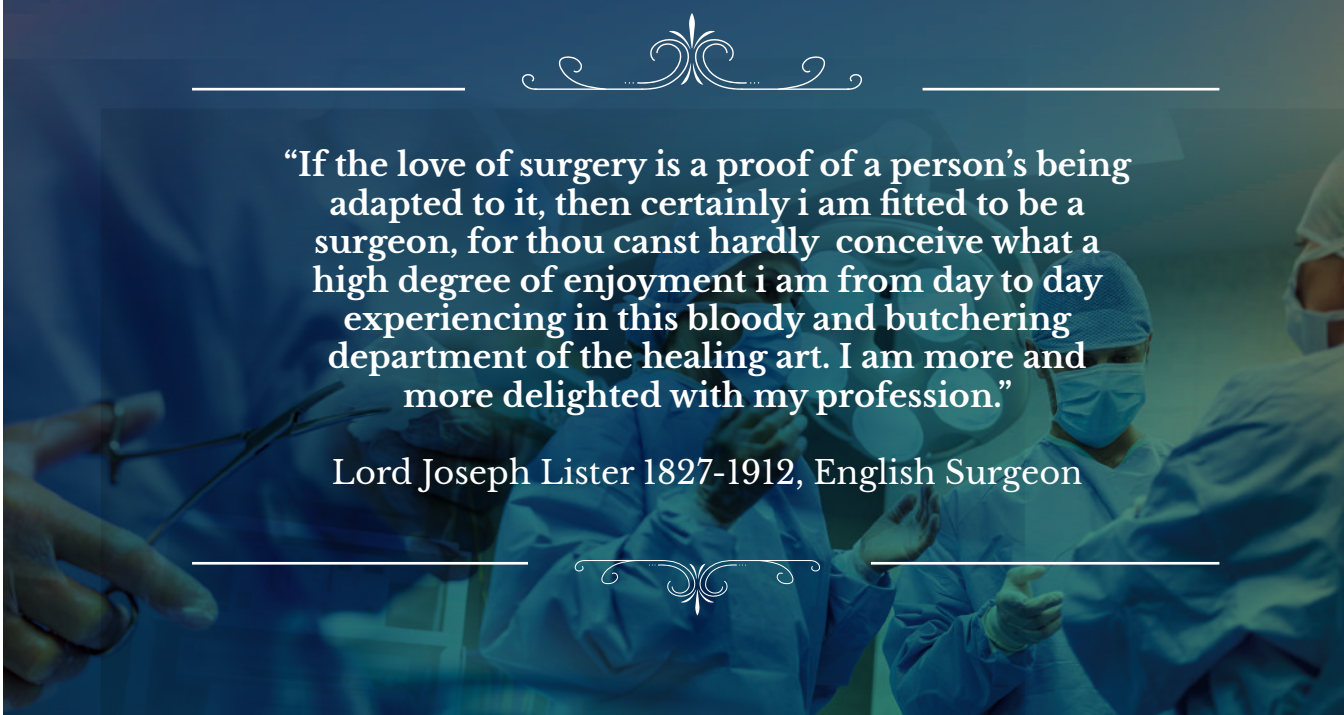
Dr Mohd Fadzil bin Mohd Irwan
Senior Principal Assistant Director
Surgical and Emergency Medicine Services Unit
Medical Development Division

Puan Sabariah binti Ahmad
Chief Nurse
Surgical and Emergency Medicine Services Unit
Medical Development Division

Puan Noor Azmah binti Ahmad Zaki
Administrative Assistant
Surgical and Emergency Medicine Services Unit
Medical Development Division

SECTION II

The Policy



"If the love of surgery is a proof of a person's being adapted to it, then certainly i am fitted to be a surgeon, for thou canst hardly conceive what a high degree of enjoyment i am from day to day experiencing in this bloody and butchering department of the healing art. I am more and more delighted with my profession."

Lord Joseph Lister 1827-1912, English Surgeon

Chapter 1: Introduction

1.1 Malaysia became a signatory in 2006 to international efforts led by the World Alliance for Patient Safety. The Ministry of Health Malaysia (MOH), as the lead agency for health in the country, is committed to driving the health care sector in the provision of **safe**, **effective** & **efficient** surgical services via good **clinical governance**.

1.2 The design of this policy document is based on a **people-centred** health care service and gives priority to performance, as embodied in the tagline: **"People First, Performance Now"**.

1.3 The Lancet Commission on **Global Surgery 2030** demonstrated 5 key messages focused on surgery:

- Access to safe, affordable surgical and anaesthesia care when needed.
- Additional surgical procedures are needed each year to save lives and prevent disability.
- Protection against catastrophic out-of-pocket expenditure due to payment for surgery and anaesthesia.
- Investment in surgical and anaesthesia services is affordable, saves lives, and promotes economic growth.
- Surgery is an indivisible, indispensable part of health care system.

1.4 As the **biggest health care provider**, hospitals in the MOH play an important leading role in the development and provision of general surgical services in Malaysia. These services are provided by general surgical units in state, major specialist, minor specialist and non-specialist hospitals.

Chapter 2: Aim of the policy

2.1 This document is intended to describe the **policy direction** of general surgical services provided in MOH hospitals.

2.2 This policy will serve primarily **to guide** the HOD & other stakeholders on the **requirements, business process** and **standard of care** in development of general surgical services.

2.3 This policy document covers **key areas** of general surgical services such as **organisation**, **human resource**, **standards** and **clinical governance**.

2.4 This document shall be reviewed in **2023** or earlier if the need arises.

Chapter 3: Vision, mission and objectives

3.1 **Vision** of the general surgical services is to provide **safe** and **sustainable** care.

3.2 **Mission** is to provide **safe services** that are **patient-centred**, **efficient** and committed to **training.**

3.3 **Objectives:**

3.3.1 **SERVICE:**

- To **embrace** the WHO "Safe Surgery Saves Lives" initiative.
- To **develop** services in tandem with the cluster concept.
- To **improve** cancer care via "Patient Navigation Program".

3.3.2 **TRAINING:**

- To **support advancement** of surgical training via **subspecialisation** and **General Surgeon with Interest (GSWI)**.
- To **facilitate** career development of Medical Officers in surgery.

Chapter 4: Hospital category

4.1 MOH hospitals are categorised as state, major specialist, minor specialist, non-specialist hospitals & special medical institutions. The list of current hospitals under MOH refers to the existing Speciality and Subspecialty Framework of Ministry of Health Hospitals under 11th Malaysia Plan. [1]

4.2 Scope of services provided is based on the category of the hospitals and the resources available.

4.3 Designated major specialist and state hospitals shall provide tertiary level subspecialty services and training. [1]

4.4 Specialist services for non-specialist hospitals shall be provided through the cluster and networking arrangement from lead hospitals or other hospitals. The arrangement shall include:

4.4.1 Designation of beds in smaller hospitals within the cluster network where the members of the surgical department from lead hospital can provide surgical services required.

4.4.2 Coordination of hospital to transfer acutely ill patients through provision of adequate number of functioning ambulances and trained human resources to accommodate the expected increase of patient movement for inter-hospital transfer for step-up/step-down care.

4.5 The **Organisation chart** of a general surgical service is as per *Appendix 1.*

4.6 Term of reference for the various heads of surgery is as per appendices:

Appendix 2: TOR of General Surgeon.
Appendix 3: TOR of Head of the Department
Appendix 4: TOR of State Head of General Surgical Services
Appendix 5: TOR of MOH Head of General Surgical Services
Appendix 6: TOR of MOH Head of Subspecialty

Chapter 5: Scope of services

5.1 OUTPATIENT CLINIC SERVICES

Clinic appointment:

i All new cases shall be seen by appointment.

PRACTICE POINT 1

ii. Date of appointment shall be determined by an MO after reviewing the referral letter.

iii. Based on the urgency of the case, patient may be seen on the same day.

PITFALL

- Triaging done by paramedics may result in delay of appointment for urgent cases.

PRACTICE POINT 2

iv. Patients suspected of having malignancy should be given an early appointment (within 2 weeks). The management of these cases should be specialist-led.

PRACTICE POINT 3

v. There should be a system in place to trace patients with malignancy who defaults.

vi. Patients deemed not requiring specialist care can be discharged to a Primary Care Clinic/non-specialist hospital.

5.2 INPATIENT SERVICES

PRACTICE POINT 4

i. The overall care of patients in the surgical wards shall be under the responsibility of a consultant or specialist.

PRACTICE POINT 5

ii. A specialist should review and be involved in the management of all critically ill patients.

iii. Specialist should engage with family members of critically ill patients to update on the progress and care plan of the patients.

PRACTICE POINT 6

iv. Appointment for follow up should be given upon discharge, and in the event where this is not feasible, the staff should call the patient and inform the appointment date.

PITFALL

- Patients who were discharged over the weekend were made to call back for a follow up appointment.

5.3 SURGERY

5.3.1 ELECTIVE SURGERY:

(A) ELECTIVE: INPATIENT

i. An operation list for elective surgery shall be made available **at least one day prior** to surgery.

ii. The minimum data set in an operation list should include details as per template in *Appendix 7.*

iii. The name of the operating surgeon must be stated for each procedure.

PRACTICE POINT 7

iv. The name of the consultant/surgeon in charge of the theatre must be specified in the list. He shall determine the sequence of the cases and their respective theatres.

v. All elective cases must be reviewed pre-and post-operatively by the operating surgeon.

vi. All cases posted for elective surgery shall be optimised and referred to anaesthesiology clinic prior to listing.

vii. Postponed cases should be given priority preferably on the next available list.

viii. Scheduling of elective cases should be based on the Guideline of Prioritisation of Cases for Emergency and Elective Surgery in Ministry of Health Malaysia 2018. [2]

ix. All surgical departments should ensure that MIS techniques are encouraged to be used for established MIS surgical procedures. Patients are encouraged to opt for MIS techniques and are appropriately advised the benefits of MIS.

x. Negotiated List: Is an elective list that has been agreed upon by anaesthesiologists and the surgeons within a stipulated time. It is meant to reduce cancellation of cases. Refer to excerpts of minutes of the meeting as per *Appendix 8.* [5]

(B) DAY CARE SURGERY

i. Hospitals with specialists shall consider Day Care Surgery as of **high priority** for simple uncomplicated cases.

ii. To ensure good utilization of Day Care Surgery, hospitals with specialists shall identify **index surgeries** to be done as Day Care.

iii. Utilisation of this service shall be monitored as per existing guidelines.[3]& [4]

5.3.2 EMERGENCY SURGERY

The prioritisation of surgery for emergency cases is as follows:

(A) Acute Emergency

i. Patient's condition, which requires immediate operation,i.e. life threatening situation, failing which life/limb will be lost. Surgery may proceed without baseline investigation/patient being fasted.

(B) Emergency

i. Patient's condition, who are haemodynamically stable that require operative procedure to be carried out, otherwise life is threatened or morbidity increased.

- Trauma (<6 Hours): Non-life threatening condition but if the operation is carried out after 6 hours, it will increase patient morbidity and mortality risk.

- Non-trauma (<8 Hours): Non-life-threatening condition but if the operation is carried out after 8 hours, it will increase patient morbidity and mortality risk.

PRACTICE POINT 8

ii. In the event of overwhelming number of emergency cases, elective surgeries may be postponed accommodating them (responsibility of the HOD).

PITFALL

- Information about long emergency list not brought to the attention of the surgical/ anaesthesiology HOD to reprioritise the utilisation of operation theatre.

- Absence of a contingency plan to clear long emergency list especially after hours and during public holidays.

(C) Urgent

i. Patient's condition, which requires operative procedure within 24-hours otherwise there is increase in morbidity.

(D) Semi-urgent

i. Patient's condition which requires operative procedure within 1/52 otherwise there may be increase in morbidity.

ii. Refer to MOH Guideline of Prioritisation of Cases for Emergency and Elective Surgery in Ministry of Health Malaysia 2018. [2]

5.3.3 CLINICAL ISSUES (CI)

- Management of patient with peripheral vascular complication requiring amputation.
- May vary due to local limitation or practice.

Scenario:
In a hospital without vascular surgeon, a patient with peripheral vascular disease in the surgical ward had amputation done by the Orthopedic surgeon.

Issue:
Should the patient be managed in a general surgical or orthopedic ward?

Recommendation:
Postoperative care of the patient is the responsibility of the operating surgeon. Refer to existing document as per *Appendix 9.* [6]

5.4 ENDOSCOPY

5.4.1 OGDS, colonoscopy & cystoscopy services shall be provided in all hospitals with specialists.

5.4.2 ERCP services shall be provided by all major/state & selected minor specialist hospitals where facilities and expertise are available.

5.4.3 All OT complexes should have endoscopy sets for use in the theatre.

5.5 NETWORKING AND CLUSTER

Surgical speciality services shall be provided to all cases that require attention in non-specialist hospitals through either of the following way:

5.5.1 Through an established network with designated specialist hospital within similar geographical location. This may or may not require referral to the specialist hospital, depending on resources available in the non-specialist hospital and nature of the case.

5.5.2 Through cluster network where surgical specialists from other hospitals within the cluster (i.e. major specialist hospital/minor specialist hospital/state hospital) provides surgical services via an entire disciplinary team approach. This is ONLY applicable to existing cluster hospitals where surgical services are being offered. Note that referrals are NOT required to transfer patient within a cluster network.

Chapter 6: Clinical operational policy

6.1 OPERATION THEATRE

i. The attire to be worn in the operating theatre should follow the local hospital guideline.

ii. Staff who leaves the theatre complex with the OT attire should change on returning.

PRACTICE POINT 9

iii. All surgeons should follow the **"Safe Surgery Saves Lives"** guideline. [7]

PITFALL

- Surgeons are known to skip the TIME OUT.

6.2 ON CALL POLICY

i. All major specialist hospitals shall provide on call services by consultant, specialist & MO.

ii. In hospitals without consultants, on call services shall be provided by the specialist & MO.

iii. Specialist doing passive call must be staying within 33km radius or 30 minutes journey to hospital. [8]

6.2.1 CONSULTANT:

i. Shall do passive call.

ii. All surgical units with subspecialty services shall do general surgical consultant call with the exceptions of Vascular and HPB surgery in designated centres.

6.2.2 SPECIALIST:

i. State and major specialist hospital:

- Hospitals with 5 to 7 or more specialists should provide active call.

ii. Minor specialist hospital:

- Specialist shall do passive call and only 1 level specialist care shall be provided.
- If specialist call services cannot be provided arrangement to cover should be in place.

6.2.3 MEDICAL OFFICER (WITH SPECIALIST QUALIFICATION) UNDER GAZETTEMENT

i. The HOD shall be responsible for the training of medical officer (with specialist qualification) undergoing gazettement.

ii. The HOD must inform medical officer (with specialist qualification) undergoing gazettement with regards to his training and need to have a feedback session at the **end of 3 months** of training. In the event where extension is anticipated, the medical officer (with specialist qualification) under gazettement should be informed by the **5th month.**

iii. Extension of gazettement period shall be considered for:

(a) Reason: Issues related to competency, knowledge, case management and attitude.
(b) Duration: Will be a minimum of 3 months and a maximum of 12 months.
(c) Placement: At the same hospital for 3 – 6 months.
(d) Re-evaluation: If the medical officer (with specialist qualification) is unable to be gazetted by 12 months, he/she should be sent to a different hospital for re-evaluation.

6.2.4 MEDICAL OFFICER:

i. The number of MOs on active calls shall be decided by the HOD based on the needs of the department.

ii. Refer to DG circular for on call services. [8]

6.3 CREDENTIALING AND PRIVILEGING

6.3.1 Surgical services are to be provided by adequately trained credentialed doctors and specialists. All categories of staff shall be credentialed and privileged to perform specific tasks appropriate to their skills and competency. Refer to existing guideline. [9]

6.4 INFORMED CONSENT

6.4.1 Informed consent should be obtained for all surgical procedures, as per *Appendix 10 & 11.*

6.4.2 All consent must be taken by the MO or specialist using the appropriate consent form as per *Appendix 10, 11 & 12.*[14] & [15]

6.4.3 The use of information leaflet is encouraged.

6.4.4 Validity and duration:

- Consent will remain valid until it is withdrawn by the patient or if there is a material change in the circumstances. Refer to existing directive. [10]

6.4.5 Eligibility and age:

- In life saving situation, where all efforts to trace the relatives and next of kin have failed, two clinical specialists, one of whom is from the related discipline can give consent for the clinical procedure to be carried out.

- The consent taken, and the efforts made to trace the next of kin must be documented in the case notes.

- Refer to MMC guidelines and General Hospital Operational Policy for consent pertaining eligibility and age. [10] & [11]

6.5 REFERRAL SYSTEM

6.5.1 Referrals to a General Surgical Department shall follow the existing MOH guidelines. [12]

Chapter 7: Training and education

7.1 Training for all the staffs shall be the responsibility of the HOD.

7.2 The HOD shall, in discussion with staff, formulate a career development plan for them.

Chapter 8: Quality Assurance

8.1 Reporting of perioperative mortalities via **e-POMR** shall be monitored.

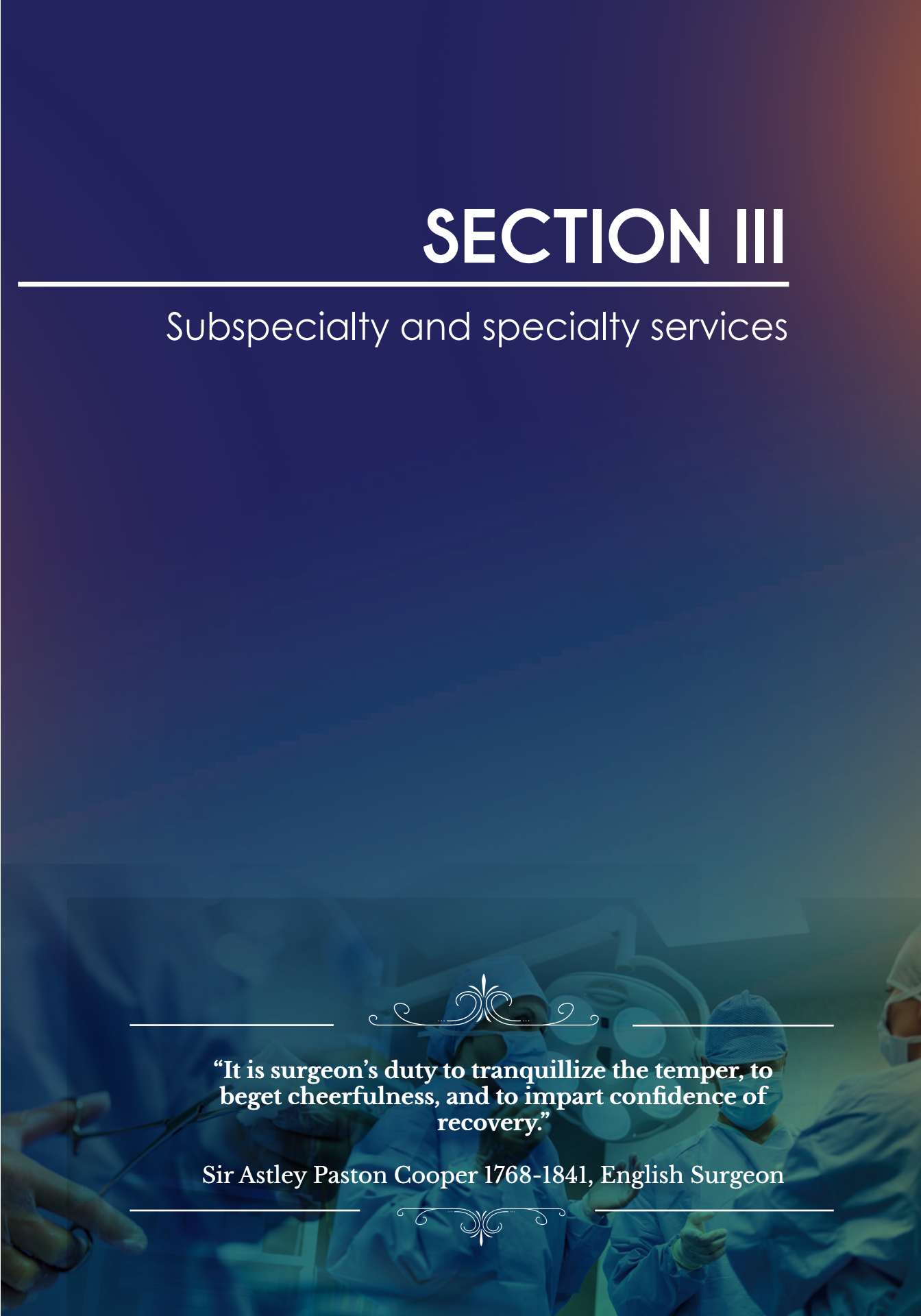
8.2 All surgical departments with specialist services should conduct clinical audit.

8.3 Comply with **"Safe Surgery Saves Lives"** initiative. [7]

8.4 KPI indicators shall be reported as per policy. [13]

SECTION III

Subspecialty and specialty services



"It is surgeon's duty to tranquillize the temper, to beget cheerfulness, and to impart confidence of recovery."

Sir Astley Paston Cooper 1768-1841, English Surgeon

1. Subspecialty of General Surgical Services

i. The recognised subspecialties under General Surgery are Breast and Endocrine, Vascular, Colorectal, Hepatopancreatobiliary, Upper Gastrointestinal, Thoracic and Trauma & Burns Surgery.

ii. The development and delivery of each subspecialty of General Surgical Services shall be coordinated and integrated within the General Surgical Services.

iii. Each subspecialty of General Surgical Services shall be headed by its respective Head of Subspecialty at the MOH level.

iv. **Scope of services** of the subspecialty is as per General Surgical Services. Refer to *Section II: Chapter 5*.

v. **Subspecialty Fellowship** is a 3 years training program that would be certified by the Board / Committee of the respective subspecialty to qualify for NSR registration.

vi. **Centres** providing subspecialty services:

(a) **Regional centres:** These centres shall provide **service**, **subspecialty training** and **research**. [1]

(b) **Service centres :** These are centres providing **subspecialty services** as part of the General Surgical Services in that facility.

vii. **List of surgical procedures** that should be provided by the surgeon is tabulated as per *Section V.*

1.1 BREAST AND ENDOCRINE SURGERY (B&E)

1.1.1 The subspecialty field of B&E Surgery generally covers diseases of the breast and almost all endocrine glands in the body. These include thyroid, parathyroid glands, pancreas and adrenal glands.

PRACTICE POINT 10

1.1.2 Breast cancer patients, where feasible should be managed through MDT.

1.1.3 General Surgeons performing hook-wire localization & wide local excisions are required to monitor their performance using KPI for B&E. Refer to *Appendix 13.* [13]

1.1.4 **The scope** of B&E Surgery is as per General Surgical Services. Refer to *Section II, Chapter 5.*

1.1.5 To improve the management of breast cancer patients, a dedicated **"One stop centre"** is encouraged. This will comprise of dedicated Breast Clinic, with the support of Radiology & Pathology services during the same clinic hour. This enables the patient suspected of breast cancer to be seen by the surgeon and subsequently undergo imaging studies as well as biopsy on the same day.

1.1.6 Privilege to perform surgery related to B&E is as in *Section V, Table 1.*

1.2 VASCULAR SURGERY

1.2.1 The subspecialty field of Vascular Surgery generally covers disease affecting all parts of the vascular system except the heart and the brain. This includes the diseases of the aorta and peripheral arteries, which are the domains of a vascular surgeon. It also includes varicose veins and vascular access for haemodialysis, which can also be managed by general surgeon with adequate training and exposure.

1.2.2 Other vascular conditions such as vascular malformations and trauma can also be managed by other surgical disciplines with adequate exposure and training.

1.2.3 **The scope** of Vascular Surgery is as per General Surgical Services and include non- invasive vascular laboratory. Refer to *Section II, Chapter 5.*

1.2.4 Appointments and referrals: Non-urgent cases are seen in the outpatient clinic on an appointment basis. Referrals can be sent in via fax and appointment will be given on the next available slot. Cases that need urgent vascular attention can be referred to the on-call team and will be discussed with the vascular consultant.

1.2.5 Privilege to surgical procedures that should be provided by the surgeons is as per *Section V, Table 2.*

1.3 COLORECTAL SURGERY

1.3.1 The subspecialty field of Colorectal Surgery generally covers diseases of the small bowel, colon, rectum and anal canal.

1.3.2 **The scope** of Colorectal Surgery is as per General Surgical Services; include Endoanal/rectal ultrasound, anal manometry, pudendal nerve latency tests and biofeedback services. Refer to *Section II, Chapter 5.*

1.3.3 The Colorectal unit is involved in training and education of nurses/AMOs, HOs, MOs, specialist and colorectal trainees.

1.3.4 Privilege to surgical procedures that should be provided by the surgeon is as per *Section V, Table 3.*

1.4 HEPATOPANCREATOBILIARY SURGERY (HPB)

1.4.1 HPB Surgery in the MOH is a dedicated tertiary care service, which provides comprehensive clinical care to patients with diseases of the liver, pancreas and biliary system.

1.4.2 **The scope** of HPB Surgery is as per General Surgical Services. Refer to *Section II, Chapter 5.*

1.4.3 HPB Surgery Services will be provided in hospitals identified by MOH. [1]

1.4.4 General surgeons should be able to do damage control surgery for HPB trauma especially liver trauma, which includes perihepatic packing, and haemorrhage control. Subsequently, management should be discussed together with the nearest HPB surgeon, based on the hemodynamic stability of the patient.

1.4.5 General surgeons performing ERCP need to be trained and credentialed at a high-volume centre.

1.4.6 Privilege to surgical procedures that should be provided by the surgeon is as per *Section V, Table 4.*

1.5 UPPER GASTROINTESTINAL SURGERY

1.5.1 The Upper GI surgery covers the field of benign and malignant diseases of oesophagus, stomach and duodenum. Surgical management of morbid obesity and clinical nutrition are also a component of this subspecialty.

1.5.2 The scope of Upper GI Surgery is as per general surgical services, including Bariatric Programme and GI laboratory to study motility disorder & reflux diseases. Refer to *Section II, Chapter 5.*

1.5.3 Privilege to surgical procedures that should be provided by the surgeon is as per *Section V, Table 5.*

1.6 THORACIC SURGERY

1.6.1 The Thoracic Surgery Services manage surgical problems related to the disease of the chest wall, lungs, pleura, mediastinum, trachea, bronchus, oesophagus and diaphragm.

1.6.2 **The scope** of Thoracic Surgery Service is as per General Surgical Services. Refer to *Section II, Chapter 5.*

1.6.3 Privilege to surgical procedures that should be provided by the surgeon is as per *Section V, Table 6.*

1.7 TRAUMA AND BURNS

1.7.1 Trauma & Burns care is provided in MOH hospitals.

1.7.2 The management of trauma will follow ATLS principle.

1.7.3 Provision of trauma care services shall be as per National Trauma Policy when available.

1.7.4 Burns care maybe provided by the general or plastic surgeon.

1.7.5 Privilege to surgical procedures that should be provided by the surgeon is as per *Section V, Table 7.*

2. Specialty Services

2.1 PAEDIATRIC SURGERY

2.1.1 The field of Paediatric Surgery in Malaysia generally covers, surgical diseases affecting children below the age of 12 except those areas generally covered by other surgical subspecialties (e.g. Neurosurgery, Cardiac Surgery, Orthopaedics and Surgery in the facial region).

2.1.2 Thoracic Surgery in children also undertaken by paediatric surgeons rather than by cardiothoracic surgeons.

2.1.3 It is an extremely general field as it is determined by ***age*** rather than organ specific.

2.1.4 There exist many similarities between General Surgery in adults and children, but there are also specific differences especially in the field of Neonatal Surgery.

2.1.5 It must be appreciated that surgeon caring for surgical children must work closely with the Paediatricians, and much of the referrals would come from them.

2.1.6 Currently Paediatric Surgical Specialist is only present in the following MOH hospitals. [1]

2.1.7 Provision of services where Paediatric Surgery is available on site is the areas of responsibility of a Paediatric Surgeon which includes General Paediatric Surgical wards, clinic, operation theatres, neonatal ICU (in collaboration with Neonatologists).

2.1.8 It would be expected that the Paediatric Surgery Services would take overall care of the surgical needs of the children, including neonates. Given adequate numbers of Paediatric Surgeons, this should not pose a major problem.

2.1.9 There should be provision for rotation amongst the general surgery trainees and junior specialists so that they are more exposed to the differences in handling surgical children.

2.1.10 Services may include the "Travelling Surgical Team" to handle Emergency Surgeries where the patient could not be easily transported especially ill neonates on ventilators with NEC or CDH. Currently these services are now provided within the Klang Valley hospitals from HKL and from the regional centres to major hospitals provision of services where paediatric surgeon is NOT available on site.

PRACTICE POINT 11

2.1.11 There will be a need for general surgeons to initially handle surgical children in hospitals where no paediatric surgeons are available on site especially in emergency cases. Familiarisation with paediatric surgery during the master's in general surgery training should serve as a template, but this would have to continue during the training period of a junior general surgeon.

2.1.12 Common conditions that will be seen by general surgeons in these centres.

(a) Appendicitis
(b) Intussusception
(c) Inguinal Hernia
(d) Child with abdominal and multi-organ trauma

(a) Appendicitis

PRACTICE POINT 12

- A trained general surgeon should be competent to diagnose, manage and undertake surgery for most children ***more than 7 years old.*** If anesthesia support, facilities and OT staff are available, this should be carried out in the facility. As this condition is relatively uncommon in those below that age, discussion with the nearest Paediatric Surgical Unit would be prudent in the management and may require transfer to those centres.

(b) Intussusception

AUDIT POINT 1

- Hydrostatic Reduction is the preferred modality of treatment for intussusception, failing which surgery should be offered. There should be an audit mechanism to look at the success rate of hydrostatic reduction and corrective actions should be taken if it falls below the National Standards.

(c) Inguinal Hernia

PRACTICE POINT 13

- This typically occurs in infants and can lead to unnecessary transfers after hours. Ideally, all hernias in premature babies and under 1 year old should be done as quickly as possible to lessen this risk.

PITFALL

➢ Referral of neonates with reducible inguinal hernia is often delayed.

- If the Networking visit does not allow this, these patients should be referred early to the nearest Paediatric Surgery Unit.

PRACTICE POINT 14

- All Inguinal hernia cases **under 2 years old** should be done by paediatric surgeon and cases **above 2 years old** can be done by general surgeon.

- The practice of waiting to do herniotomies until certain weight (e.g. 10kg) is not ideal and may lead to being incarcerated. Attempts at manual reduction, if done correctly, should be successful in about 99% and should only be attempted by experienced personnel.

(d) Child with abdominal and multi-organ trauma.

- Most children with solid organ injuries due to blunt abdominal trauma can be managed non-operatively provided resuscitation is done adequately. A CT scan is usually needed to determine the extent of injuries and is usually necessary in the absence of an experienced Paediatric Radiologist, Managed Care Network, which includes discussion with the Paediatric Surgical unit, would ideally help to avoid unnecessary surgery in these children.

- Privilege to surgical procedure that should be provided by the surgeons is as per Section V, Table 8.

2.2 NEUROSURGERY

2.2.1 Severe head injury is a neurosurgical emergency. Based on the concept *"Time is Neuron",* neurosurgical intervention should be done early.

2.2.2 Neurosurgical intervention:

(a) In hospitals **with Neurosurgeon:**

- All neurosurgery cases will be managed by the neurosurgeon.

(b) In hospital **without Neurosurgeon:** *

- The General Surgeon may perform burr hole/ craniotomy craniectomy for EDH & SDH excluding posterior fossa bleeding. *(*General Surgeon may need training to provide the service).*

Hospital with CT-scan	Hospital without CT-scan
General Surgeon shall provide surgical intervention for EDH & SDH.	Refer to nearest hospital with CT scan.

- Privilege to surgical procedure that should be provided by the surgeons is as per Section V, Table 9.

2.3 UROLOGY

2.3.1 Management of urological condition:

(a) In hospitals **with Urologist:**

- All urology cases will be managed by the urologist.

(b) In hospital **without Urologist:**

- General Surgeons are expected to provide basic Urology Services. In whatever scope it is provided, the surgeon must provide appropriate care and must have undergone some form of training.

- Privilege to surgical procedure that should be provided by the surgeons is as per Section V, Table 10.

SECTION IV

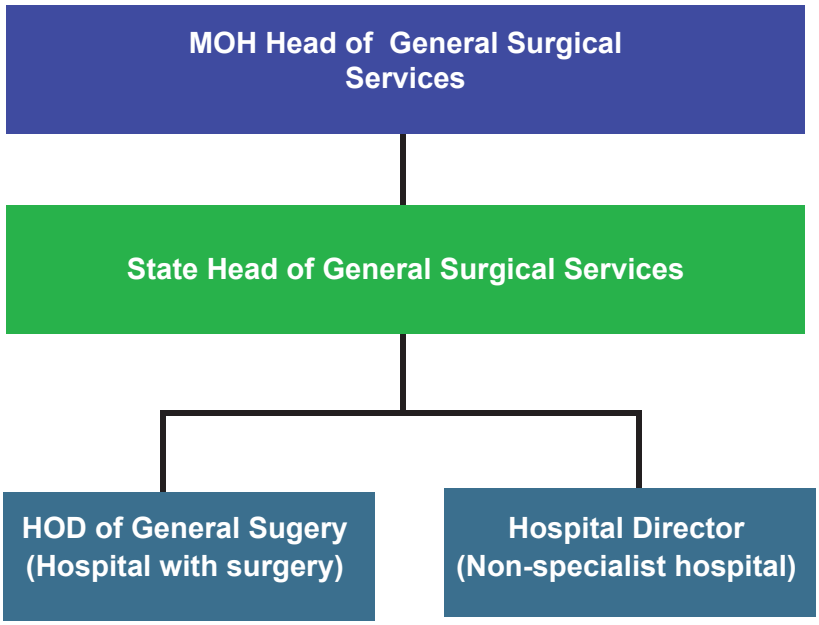
Appendices

"The patient is the centre of the medical universe around which all our works revolve and towards which all our efforts trend."

J.B Murphy 1857-1916, Professor of Surgery,
Northwestern University, Chicago, Illinois, USA

APPENDIX 1

ORGANIZATION CHART
GENERAL SURGICAL SERVICES



APPENDIX 2

TERMS OF REFERENCE OF GENERAL SURGEON

1 In the Ministry of Health, General Surgeons is gazetted by the Director General of Health, as stated under 'Perintah 27, Bab F' of the General Order (Perintah-Perintah Am) effective on 1ST March 1974.

2 Being a core specialty discipline, General Surgery Services have been a vital requirement for a full-service hospital to function. The role of General Surgeons has evolved greatly over the last few decades. From a historically diverse specialty broadly covering head and neck, breast, thorax, abdomen and gastrointestinal, paediatric, oncology and trauma, it has been gradually defined as a core surgical specialty covering Trauma and Burn Surgery, Breast and Endocrine Surgery, Colorectal Surgery, Upper Gastrointestinal Surgery, Hepatopancreatobiliary Surgery, Vascular Surgery and Thoracic Surgery.

3 Roles of General Surgeons:

3.1 In the Ministry of Health, the role of a General Surgeon is largely defined based on the type of institution or the level of hospital he or she serves in.

3.2 In all Minor Specialist Hospitals and many Major Specialist Hospitals where other main surgical specialties such as Urology, Paediatric Surgery, Neurosurgery and Plastic Surgery are not available, General Surgeons assume the role of a Generalist in Surgical Practice and provide care for patients with all spectrum of surgical disorders, especially in management of acute surgical emergencies, while providing consultation and elective surgeries for a broad variety of cases under the General Surgery Specialty.

3.3 In many other Major Specialist Hospitals and State Hospitals, where other main surgical specialties are available, General Surgeons will assume the role of a specialist covering the field of General Surgical Specialty. Further training permits General Surgeons to focus in areas of subspecialties under General Surgery as mentioned in section III (Subspecialty and Specialty Services).

4 Responsibilities of General Surgeons:

4.1 To lead and plan the management of patients under General Surgery.

4.2 To conduct daily ward rounds to ensure in-patients receive optimal treatment.

4.3 To conduct surgical outpatient clinics for new and follow-up cases.

4.4 To review patients referred to General Surgery from Emergency Department and patients from other disciplines.

4.5 To examine and evaluate patients for purpose of insurance, PERKESO and KWSP.

4.6 To carry out on call duties as directed by the hospital director.

4.7 To plan and perform all surgeries under elective and emergency operating theatre. All elective cases under major, minor and day care operating theatre comes under the direct responsibility of surgeons.

4.8 To supervise and guide medical officers credentialed to perform certain surgical procedures/operations.

4.9 To be directly involved in training and supervision of house officers and medical officers of the department. This will include teaching sessions and continuous medical educations activities planned to suite each level of training, i.e. house officers, junior medical officers, surgical residents/Master of Surgery candidates.

4.10 To assist the head of department in conducting activities for quality assurance, audits and assessments of medical staffs.

4.11 To assist in administrative tasks as delegated by the head of department and involve in various committees and task forces set up by the hospital director.

APPENDIX 3

TERMS OF REFERENCE OF HEAD OF THE DEPARTMENT

1 All Head of the Departments shall receive mandatory training in administration to effectively manage and lead the General Surgery Services in a hospital.

2 The General Surgery Service within a hospital shall, at all-time be administratively managed by the Head of Department of General Surgery who is a gazetted General Surgeon (according to the gazettement criteria of MOH).

The roles include:

2.1 Responsible for the management of all the components of the General Surgical Services, namely administrative, clinical services and training.

2.2 Each General Surgery Department shall have their own contingency plan. This plan must be available on board, to address the issue of unexpected crisis.

2.3 Act as an advisor to the hospital director on matters pertaining to General Surgical Services.

2.4 Responsible for planning, implementation and monitoring of the surgical services and activities of the department in line with national, state and hospital policies.

2.5 Work closely with the relevant stakeholders such as the Hospital Director, Nursing managers and heads of other clinical services in areas pertaining to the development and implementation of the services. This includes participation in relevant task forces, committees and quality assurance activities as planned by the hospital director.

2.6 Responsible for the overall management of all the components of department administration. In particular, matters pertaining to the organisation, staff, asset, training, budget, development and expansion.

2.7 General Surgery department activities and program shall be under the scrutiny of the Head of Department and assisted by the other Consultants, Surgeons and Medical Officers in the Department. These include regular meetings with all department personnel, continuous medical education activities, audits and assessments of staff/clinical practices.

2.8 Work closely with Surgical OT sister, ward sister, and surgical clinic sister. These nursing heads/sisters shall be responsible for assisting the Head of Department in coordinating the nursing service, activities and program in the department.

2.9 Act as a leader in clinical practices and provides professional leadership and supervision for all members of the surgical team: Surgeons, Medical Officers and House Officers.

2.10 Request for procurement of new or replacement equipment shall be submitted to the National Head of General Surgery via the Director and State Head of General Surgery.

2.11 Appropriate planning must be done in purchasing consumables to ensure that services are provided without interruption.

APPENDIX 4

TERMS OF REFERENCE OF STATE HEAD OF GENERAL SURGICAL SERVICES

1 Serves as the overall leader of the General Surgical Services in the state.

2. The state Head of General Surgical Service shall ensure that current national policies are being carried out to ensure smooth delivery of General Surgical Services. He or she collaborates with the National Head of General Surgery in formulating strategic plans for services, development, policies and procedures.

3 Serves as clinical advisor to the State Director of Health in the planning of development and expansion of general surgical specialty services in all levels of health facilities i.e. state general hospital, district hospitals and visiting district hospitals. Aspect of development involves human resources, equipment and facilities.

4 Planning and implementation of training for all level of staffs involved in the General Surgical Services.

4.1 Identify needs and training requirements of all surgeons in the state.

4.2 Planning of mode of assessment for house officers and medical officers under the state surgical service.

5 To provide input and planning for posting for adequate number of trained surgeons in the state and ensure adequate coverage of each region of the state in term of service.

6 Ensure smooth delivery of general surgical services by visiting general surgeon to district hospitals without specialist.

7 If there is any unexpected crisis, the head must immediately inform the Hospital Director and the National Advisor of General Surgical Services.

8 Provide input regarding acquiring assets in the field of general surgery through out the state.

APPENDIX 5

TERMS OF REFERENCE OF MOH HEAD OF GENERAL SURGICAL SERVICES

1 The Head of General Surgery is a gazetted general surgeon appointed by the Director General of Health of Malaysia to assist the Ministry of Health in the planning of the development of General Surgical Specialty in MOH.

2 The roles and responsibilities of the Head of General Surgery are as below:

2.1 Planning and recommending to Ministry of Health the development and future direction of the specialty services, which includes adequate distribution of infrastructures across the nation to ensure accessibility and equality of services provided by the ministry.

2.2 Planning of human resources, especially specialist manpower to cater for the growing needs of hospitals /institutions of the Ministry of Health. These include identifying future successors, recommending promotions, human capital development (career development of medical officers and specialist) and providing feedbacks regarding gazettement of general surgeons.

2.3 Planning and recommendation of training requirement for the specialty, monitoring the implementation of specialty/ subspecialty training programs and streamline training according to the needs and development of the services.

2.4 Planning and conducting annual meetings with specialist within the specialty at least once (1) a year.

2.5 Organising visits to each state on a regular basis.

2.6 Organising conferences within the specialty at least once (1) a year.

APPENDIX 6

TERMS OF REFERENCE OF MOH HEAD OF SUB SPECIALTY

1 Report to the MOH Head of General Surgical Services.

2 Coordinate and provide direction for the development of its subspecialty, in consultation with the MOH Head of General Surgical Services.

3 Develop, coordinate and facilitate the subspecialty training program.

4 Each subspecialty service shall be guided by the general policies and procedures pertaining to the practice of surgery as well as special requirements for its individual subspecialty.

5. The subspecialty service may function as a unit within the Department of General Surgery when the patient case load within the unit is sufficiently high and shall be headed by a trained consultant.

APPENDIX 7

TEMPLATE FOR OT LIST

UNIT:								
HOSPITAL:								
OPERATING LIST:								
DATE:		**MONTH:**		**YEAR:**		**TIME:**		
CONSULTANT:								
MEDICAL OFFICER:								
NO	**NAME**	**NRIC AGE/SEX/ WARD**	**DIAGNOSIS**	**PROCEDURE**	**REMARK**	**SURGEON**	**CALLED** **ARRIVED**	**IN** **OUT**
1								
2								
3								

Negotiated list and OT utilization:

Reference:

MINIT MESYUARAT BAGI MESYUARAT BERTUJUAN UNTUK MENGOPTIMAKAN PERKHIDMATAN DEWAN BEDAH DI HOSPITAL-HOSPITAL KEMENTERIAN KESIHATAN MALAYSIA.
(20 September 2016)/KKM.600-27/8/7(20) [5]

Kesimpulan Mesyuarat:

Perkara 2.17:
Long Elective OT List-Negotiated list

Mesyuarat dimaklumkan isu Long Elective OT List *dan penyelesaiannya dengan mengadakan* Negotiated list *telah dibincangkan di mesyuarat yang lepas semasa mantan Ketua Perkhidmatan Pembedahan terdahulu. Senarai* OT *yang dicadangkan oleh Pakar Bedah yang telah dibincangkan dan dipersetujui oleh Pakar* Anaesthesia *hendaklah dihabiskan pada hari yang sama.*

Mesyuarat dimaklumkan bahawa kebanyakan hospital tidak melaksanakan saranan Negotiated List *ini.*

Kesemua ahli mesyuarat bersetuju bahawa dengan adanya OT time *sehingga 12 jam dan bilangan kakitangan yang mencukupi, keperluan malaksanakan* Negotiated List *ini mungkin kurang relevan.*

Recommendation for management of patient with peripheral vascular complication requiring amputation.

Reference:
MINIT MESYUARAT KOORDINASI PERKHIDMATAN PELBAGAI DISIPLIN KLINIKAL KEMENTERIAN KESIHATAN MALAYSIA (KKM), PERKHIDMATAN PEMBEDAHAN AM (VASCULAR SURGERY) DAN PERKHIDMATAN PEMBEDAHAN ORTOPEDIK.[6]

Management of peripheral vascular conditions including trauma
(14 October 2016)

Ahli mesyuarat telah bersetuju bahawa:

Perkara 4.2:
Pengurusan "Peripheral Vascular Disease with Gangrene Needing BKA or AKA"

1. *Kemasukan wad surgikal/ortopedik.*

2. *Untuk tahap amputasi* (amputation level) *akan diputuskan oleh Jabatan yang menguruskan pesakit dengan atau tanpa CT angiogram.*

3. *Komunikasi antara jabatan berkaitan tidak harus melambatkan pengurusan rawatan pesakit.*

4. *Selepas amputasi, Jabatan yang melakukan pembedahan tersebut hendaklah meneruskan rawatan hingga pulih.*

5. *Rawatan rehabilitasi selepas amputasi akan di uruskan oleh Jabatan Orthopedik.*

CONSENT FOR OPERATION/PROCEDURE

HOSPITAL _____

CONSENT FOR OPERATION/PROCEDURE PER/CONSENT/2016

I, _____ of (address) _____
_____ hereby agree and consent

*(A) to undergo the operation(s)/procedure(s) of _____
*(B) to the submission of my *child/ward, _____, IC/ID No. _____
to undergo the operation(s)/procedure(s) of _____

under (type of anaesthesia) *general/local/other(s) _____
the nature, purpose and potential risk(s) of which have been explained to me by Dr. _____
through interpretation by (if any) _____. I fully understand the explanation given and also understand the reasons, consequences and risks of the operation/procedure.

I also agree and consent to any additional or alternative operative measures/procedures as may be found necessary during the course of the above mentioned operation(s)/procedure(s) and to the administration of general, local or other anaesthesia for any of these purposes.

No guarantee has been given to me that the operation/procedure/anaesthetic care will be performed by any particular practitioner.

Signed : _____
(*Patient/Parent/Guardian)
Relationship: _____
IC/ID No. : _____
Date : _____

Note:
- If the person gives his/her consent as a guardian, his/her relationship with the patient should be stated below his/her signature.
- The witness may be another practitioner or a nurse who is not directly involved in the management of the patient nor related to the patient or the practitioner taking consent.

Witness:
Signature : _____
Name : _____
IC/ID No. : _____
Designation : _____
Date : _____

Interpreter (if any):
Signature : _____
IC/ID No. : _____
Date : _____
Language used: _____

I confirm that I have explained the nature, purpose and potential risk(s) of this operation(s)/ procedure(s) to the *patient/parent/guardian.

Signed : _____
(*Medical/Dental Practitioner)
MMC/MDC No.: _____
Date : _____
Stamp :

Note:
Any amendments to the form are to be made before the explanation is given and the form is submitted for signature.

*Delete as appropriate

CONSENT FOR OPERATION/PROCEDURE

HOSPITAL _____

Name of patient: _____
MRN No. : _____
IC/ID No. : _____
Gender : _____
Date : _____

Attachment A: Explanation of operation/procedure _____
_____

Nature:
_____
_____
_____
_____
_____

Purpose:
_____
_____
_____

Risk(s):
1. _____
2. _____
3. _____
4. _____
5. _____

Title of additional explanatory note/information sheet provided (if any): _____
_____

Signature of *Patient/Parent/Guardian:

_____

Note:
Consent for operation/procedure and Attachment A must be signed by the same person.

*Delete as appropriate

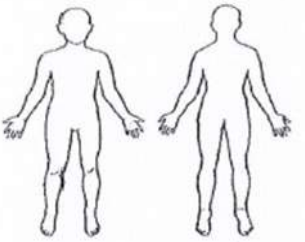
PHOTOGRAPHY/MULTIMEDIA CONSENT FORM

HOSPITAL _____

PHOTOGRAPHY/MULTIMEDIA CONSENT FORM PER/PHOTO/2016

Name of patient : _____
IC/ID No. : _____
MRN : _____

Indicated in the diagram below, is the area(s) which is/are to be photographed/recorded (if applicable):



Front Back

Part(s) of the body in words:

(1) _____
(2) _____
(3) _____
(4) _____
(5) _____

I, *parent/guardian/spouse/relative of the above named, consent to the *photography/multimedia recording, as indicated above, of *myself/the said patient, to be used only for diagnostic, treatment, teaching, academic and research purposes. The record is not for commercial or personal publication. However, I agree and give my consent for this record to be used for health promotion or teaching. I have been explained and understand that *my/the patient's identity and modesty will be protected as far as possible.

Signature of *patient/person consenting: _____
Name of person consenting : _____
Relationship : _____
IC/ID No. of person consenting : _____
Date : _____

Translator (if any):
Signature : _____
Name : _____
IC/ID No. : _____
Date : _____
Language used : _____

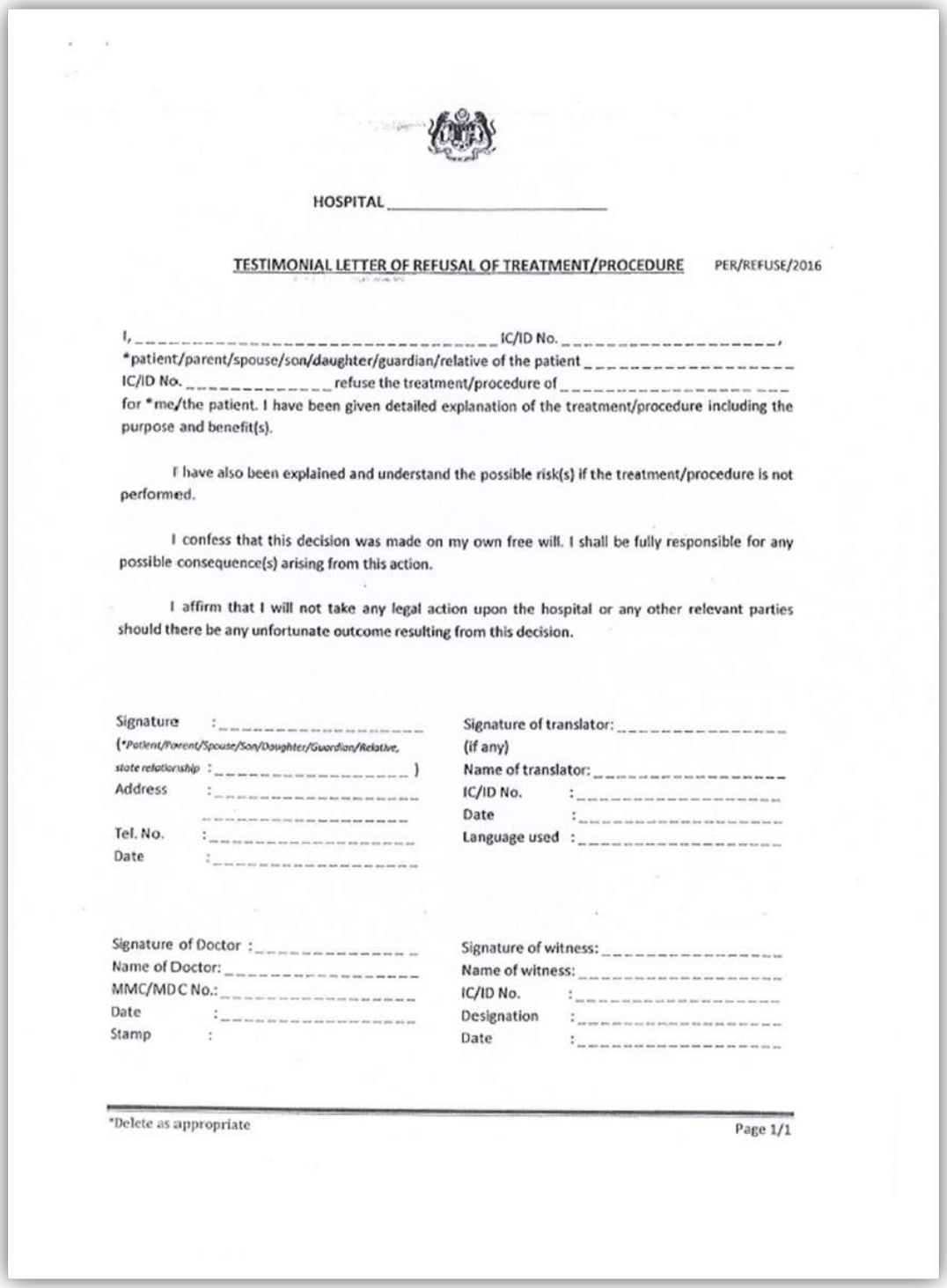
Requesting person:
Signature : _____
Name : _____
Designation : _____
IC/ID No. : _____
Date : _____

Witness:
Signature : _____
Name : _____
Designation : _____
IC/ID No. : _____
Date : _____

*Delete as appropriate

Page 1/1

TESTIMONIAL LETTER OF REFUSAL OR TREATMENT/PROCEDURE



HOSPITAL _____

TESTIMONIAL LETTER OF REFUSAL OF TREATMENT/PROCEDURE PER/REFUSE/2016

I, _____ IC/ID No. _____,
*patient/parent/spouse/son/daughter/guardian/relative of the patient _____
IC/ID No. _____ refuse the treatment/procedure of _____
for *me/the patient. I have been given detailed explanation of the treatment/procedure including the purpose and benefit(s).

I have also been explained and understand the possible risk(s) if the treatment/procedure is not performed.

I confess that this decision was made on my own free will. I shall be fully responsible for any possible consequence(s) arising from this action.

I affirm that I will not take any legal action upon the hospital or any other relevant parties should there be any unfortunate outcome resulting from this decision.

Signature : _____
(*Patient/Parent/Spouse/Son/Daughter/Guardian/Relative, state relationship : _____)
Address : _____
_____
Tel. No. : _____
Date : _____

Signature of translator: _____
(if any)
Name of translator: _____
IC/ID No. : _____
Date : _____
Language used : _____

Signature of Doctor : _____
Name of Doctor: _____
MMC/MDC No.: _____
Date : _____
Stamp :

Signature of witness: _____
Name of witness: _____
IC/ID No. : _____
Designation : _____
Date : _____

*Delete as appropriate

Page 1/1

APPENDIX 13

KEY PERFORMANCE INDICATOR

GENERAL SURGERY			
NO	**Key Performance Indicators (KPI)**	**Optimal Target**	**Frequency**
1	Percentage of new non-urgent cases that were given appointment for first consultation within (≤) 4 weeks at General Surgery Clinic.	≥75%	Monthly
2	Percentage of patients with waiting time of ≤ 90 minutes to see the doctor at General Surgery Clinic ≥ 90% 6 monthly	≥90%	3 Monthly
3	Post appendicectomy complications rate during hospital stay.	≤10%	Monthly
4	Percentage of cases with unplanned return to the operating theatre within the same admission following an elective surgical procedure.	≤5%	3 Monthly
5	Percentage of colonic perforation during colonoscopy.	≤2%	3 Monthly
6	Percentage of cancellation of elective surgery.	≤10%	Monthly
7	Percentage of complications following thyroidectomy (hemi & total) for benign thyroid diseases.	≤10%	3 Monthly

* Subject to the latest and updated indicators and its standard

KEY PERFORMANCE INDICATOR

BREAST AND ENDOCRINE SURGERY			
NO	**Key Performance Indicators (KPI)**	**Optimal Target**	**Frequency**
1	Percentage of patients with waiting time of less than 3 months for elective thyroidectomy.	≥ 90%	Monthly
2	Percentage of breast cancer patients going for definitive surgery within (≤) 4 weeks of the diagnosis.	≥75%	3 Monthly
3	Percentage of patients with suspicious breast lump/lesion that were given appointment within (≤) 14 working days of referral at Breast clinic.	≥80%	3 Monthly
4	Percentage of patients with recurrent laryngeal nerve (RLN) injury in primary benign thyroid operation.	≤3%	3 Monthly
5	Percentage of patients with clear surgical margins in Breast Conserving Surgery (BCS).	≥75%	3 Monthly
6	Percentage of patients with missing parathyroid gland in surgery for renal hyperparathyroidism.	<20%	3 Monthly

* Subject to the latest and updated indicators and its standard

KEY PERFORMANCE INDICATOR

VASCULAR SURGERY			
NO	**Key Performance Indicators (KPI)**	**Optimal Target**	**Frequency**
1	Post -operative mortality rate for elective open repair of abdominal aneurysm (AAA).	<10%	3 Monthly
2	Percentage of patients undergoing secondary amputation following intervention for critical limb ischemia (CLI).	<40%	3 Monthly
3	Percentage of patients with waiting time of ≤ 90 minutes to see the doctor at General Surgery Clinic (General Surgery).	≥90%	3 Monthly
4	Percentage of dialysis-access induced limb ischemia following native arterio-venous fistula creation.	<2%	3 Monthly
5	Percentage of lower limb ischemia following an elective open abdominal aortic aneurysm repair.	<1%	3 Monthly
6	Percentage of cases with unplanned return to the operating theatre within the same admission following an elective surgical procedure (General Surgery).	≤10%	3 Monthly

* Subject to the latest and updated indicators and its standard

KEY PERFORMANCE INDICATOR

COLORECTAL SURGERY			
NO	**Key Performance Indicators (KPI)**	**Optimal Target**	**Frequency**
1	Rate of immediate stoma revision after its creation.	<20%	3 Monthly
2	Percentage of patient with waiting time of ≤ 3 weeks for colorectal cancer (CRC) surgery.	≥90%	3 Monthly
3	Percentage of patients with waiting time of ≤ 4 weeks for elective colonoscopy.	≥90%	3 Monthly
4	Rate unclear surgical margins in rectal cancer surgery.	<10%	3 Monthly
5	Percentage of colonic perforation during colonoscopy.	<2%	3 Monthly
6	Occurrence of anal stenosis following haemorrhoidectomy.	0	3 Monthly

* Subject to the latest and updated indicators and its standard

KEY PERFORMANCE INDICATOR

HEPATOPANCREATOBILLIARY SURGERY			
NO	**Key Performance Indicators (KPI)**	**Optimal Target**	**Frequency**
1	Percentage of non-urgent cases that are given appointment for first consultation within 1 month.	≥75%	3 Monthly
2	Percentage of patients with waiting time ≤ 1 month for elective surgery for hepatobiliary malignancy.	≥90%	3 Monthly
3	Percentage of cancellation of listed elective hepatobiliary surgical cases.	<10%	3 Monthly
4	Mortality ≤ 30 days following elective Hepatic Resection.	≤5%	6 Monthly
5	Mortality ≤ 30 days following elective Whipple's operation.	≤5%	3 Monthly
6	Percentage of attendance for department CME.	≥80%	Monthly

* Subject to the latest and updated indicators and its standard

KEY PERFORMANCE INDICATOR

UPPER GASTROINTESTNAL SURGERY			
NO	**Key Performance Indicators (KPI)**	**Optimal Target**	**Frequency**
1	Percentage of oesophageal or gastric cancer patients with clear surgical margin in curative resection.	≥75%	3 Monthly
2	Percentage of patients with oesophageal or gastric cancers operated within (≤) 3 weeks after pre- operative optimization.	≥75%	3 Monthly
3	Percentage of symptomatic patients referred to Upper GI team to undergo Upper GI endoscopy within (≤) 6 weeks.	≥75%	Monthly
4	Percentage of patients with anastomotic leak after oesophageal surgery.	<30%	6 Monthly
5	Percentage of patients with gastric cancer undergoes curative surgical resection which ≥ 15 lymph nodes resected and pathologically examined.	≥70%	6 Monthly
6	Percentage of patients with benign stomach disorder who undergo elective surgery transfused with more than 4 units' blood intra-operatively.	<15%	6 Monthly

* Subject to the latest and updated indicators and its standard

KEY PERFORMANCE INDICATOR

THORACIC SURGERY			
NO	**Key Performance Indicators (KPI)**	**Optimal Target**	**Frequency**
1	Percentage of elective thoracotomy wound infection.	<2%	3 monthly
2	Percentage of chest drain related complications.	<2%	3 monthly
3	Percentage of stump leak following elective lobectomy or pneumonectomy.	<5%	6 monthly
4	Percentage of patients with respectable and operable thoracic malignancy operated within 3 weeks of diagnosis.	>90%	3 monthly
5	Percentage of diagnosed thoracic empyema referred for surgical intervention within 2 weeks of diagnosis.	>75%	3 monthly

* Subject to the latest and updated indicators and its standard

KEY PERFORMANCE INDICATOR

TRAUMA AND BURNS			
No	**Key Performance Indicators (KPI)**	**Optimal target**	**Frequency**
1	Timeliness for crash operation within (≤) 60 minutes.	≥75%	3 Monthly
2	Minor trauma mortality rate.	<8%	3 Monthly
3	Severe Burn Mortality Rate (BURN).	<30%	3 Monthly
4	Percentage for non-therapeutic laparotomy (NTL) for trauma cases (TRAUMA).	<20%	3 Monthly
5	Percentage of trauma alert responded by surgeon within (≤) 30 minutes.	>75%	6 Monthly
6	Percentage of patients with duration of surgery within (≤) 90 minutes in crash trauma laparotomy.	>75%	3 Monthly
7	Percentage of cases with unplanned return to the operating theatre within the same admission following an elective surgical procedure (general Surgery).	≤10%	Monthly

* Subject to the latest and updated indicators and its standard

APPENDIX 14

PRACTICE POINTS, AUDIT POINTS AND PITFALLS

Practice point (PP)

- Formatting the product of focus of implementation.
- This PP generally mandatory to be implemented in every department.
- Process which should be in place in all surgical departments that reflect good practice and patient centered.

Pitfall (PF)

- Common shortfalls in such process are highlighted in the pitfalls (PF).

Audit point (AP)

- Should be used to facilitate and improvement in terms of performance of the centers.
- All HODs are encouraged to audit & improve the outcome of their hospital process of care.

PRACTICE POINTS, AUDIT POINTS AND PITFALLS

PRACTICE POINT 1	PITFALL
✓ Date of appointment shall be determined by an MO after reviewing the referral letter. ✓ Based on the urgency of the case, patient may be seen on the same day.	➢ Triaging done by paramedics may result delay of appointment for urgent cases.
PRACTICE POINT 2	
✓ Patients suspected of having malignancy should be given an early appointment (within2 weeks). The management of these cases should be specialist-led.	
PRACTICE POINT 3	
✓ There should be a system in place to trace patients with malignancy who defaults.	
PRACTICE POINT 4	
✓ The overall care of patients in the surgical wards shall be under the responsibility of a consultant or specialist.	
PRACTICE POINT 5	
✓ A specialist should review and be involved in the management of all critically ill patients.	
PRACTICE POINT 6	
✓ Appointment for follow up should be given upon discharge, and in the event where this is not feasible, the staff should call the patient and inform the appointment date.	➢ Patients who were discharged over the weekend were made to call back for a follow up appointment.
PRACTICE POINT 7	
✓ The name of the consultant/surgeon in charge of the theatre must be specified in the list. He shall determine the sequence of the cases and their respective theatres.	

PRACTICE POINTS, AUDIT POINTS AND PITFALLS

PRACTICE POINT 8	PITFALL
✓ In the event of overwhelming number of emergency, elective surgeries should be postponed to accommodate them. (responsibility of the HOD)	➢ Information about long emergency list not brought to the attention of the surgical/anaesthesiology HOD to reprioritize the utilization of operation theatre. ➢ Absence of a contingency plan to clear long emergency list especially after hours and during public holidays.
PRACTICE POINT 9	
✓ All surgeons should follow the "Safe Surgery Save Lives" guideline.	➢ Surgeons are known to skip the TIME OUT.
PRACTICE POINT 10	
✓ Breast cancer patients, where feasible should be managed through MDT.	
PRACTICE POINT 11	
✓ There will be a need for general surgeons to initially handle surgical children in hospitals where no paediatric surgeons are available on site especially in emergency cases. Familiarisation with paediatric surgery during the master's in general surgery training should serve as a template, but this would have to continue during the training period of a junior general surgeon.	

PRACTICE POINTS, AUDIT POINTS AND PITFALLS

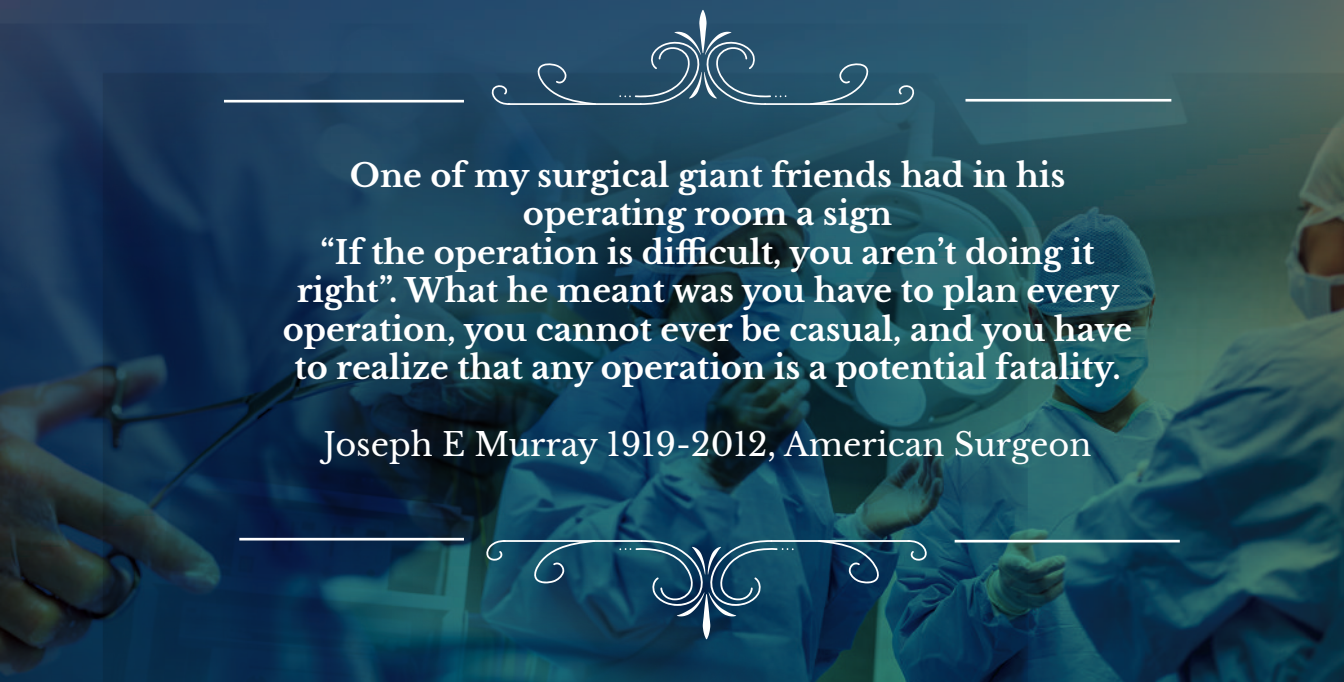
PRACTICE POINT 12	
✓ A trained general surgeon should be competent to diagnose, manage and undertake surgery for most children more than 7 years old. If Anaesthesia support, facilities and OT staff are available, this should be carried out in the facility. As this condition is relatively uncommon in those below that age, discussion with the nearest Paediatric Surgical Unit would be prudent in the management and may require transfer to those centres.	
PRACTICE POINT 13	**PITFALL**
✓ This typically occurs in infants and can lead to unnecessary transfers after hours. Ideally, all hernias in premature babies and under 1 year old should be done as quickly as possible to lessen this risk.	➢ Referral of neonates with reducible inguinal hernia is often delayed.
PRACTICE POINT 14	
✓ All Inguinal hernia cases under 2 years old should be done by paediatric surgeon and cases above 2 years old can be done by general surgeon.	

AUDIT POINT (AP)

AUDIT POINT 1
Hydrostatic Reduction is the preferred modality of treatment for intussusception, failing which surgery should be offered. There should be an audit mechanism to look at the success rate of hydrostatic reduction and corrective actions should be taken if it falls below the National Standards.

SECTION V

List of procedures



One of my surgical giant friends had in his operating room a sign "If the operation is difficult, you aren't doing it right". What he meant was you have to plan every operation, you cannot ever be casual, and you have to realize that any operation is a potential fatality.

Joseph E Murray 1919-2012, American Surgeon

TABLE 1: BREAST & ENDOCRINE SURGERY

GENERAL SURGEON	SUBSPECIALTY
1. Wide local excision 2. Mastectomy with axillary dissection 3. Microdochectomy 4. Hook wire localization 5. Hemithyroidectomy 6. Total thyroidectomy 7. Sistrunk operation	1. Sentinel lymph node biopsy 2. Oncoplastic breast surgery * 3. Breast implants 4. Various types of volume displacement maneuvers & mastopexy e.g. Grisotti Mastopexy) 5. Breast reconstruction using flaps (e.g. LD flaps) 6. Retrosternal Goitres 7. Secondary thyroidectomy 8. Neck dissections 9. Endoscopic thyroidectomy ** 10. All parathyroid surgery 11. All adrenal surgery NOTE: * Only to be done by BNE surgeons received training in Oncoplastic Breast procedures ** Only to be done by BNE surgeons received training in endoscopic thyroidectomy procedures

TABLE 2: VASCULAR SURGERY	
GENERAL SURGEON	**SUBSPECIALTY**
1. Venous access i.e. chemo port insertion 2. High saphenous vein ligation 3. Femoral embolectomy 4. Creation of AVF 5. Vascular repair in trauma	1. All vascular surgical procedures.

TABLE 3: COLORECTAL SURGERY

GENERAL SURGEON	SUBSPECIALTY
1. Right hemicolectomy 2. Extended right hemicolectomy 3. Left hemicolectomy 4. Simple FIA 5. Lateral Sphincterotomy 6. Small bowel resection 7. Meckel's diverticulectomy Emergency 8. Obstetric sphincter repair 9. Subtotal colectomy with ileorectal anastomosis 10. 10.Hartmann's procedures open & 11. laparoscopic colostomy or ileostomy 12. Anterior resection 13. Open haemorrhoidectomy 14. Reversal of Hartmann's 15. APR 16. LAR 17. Altmeier procedure 18. Laparoscopic colorectal surgery (excluding LAR / ULAR/ /APR)	1. Ultra-low anterior resections 2. Delorme's procedure 3. Coloanal anastomosis 4. PPILA 5. Recurrent & complex FIA 6. Rectovaginal fistula 7. Sphincter injury secondary to trauma 8. Rectopexy with or without resection (open or laparoscopic) 9. STARR 10. Laparoscopic LAR/ULAR/APR 11. Pelvic exenteration , TEMS 12. LIFT

TABLE 4: HEPATOPANCREATOBILIARY SURGERY

GENERAL SURGEON	SUBSPECIALTY
1. Open cholecystectomy 2. Laparoscopic cholecystectomy 3. CBD exploration 4. Splenectomy 5. Distal pancreatectomy 6. Emergency non -anatomical liver resection in trauma 7. Choledochal cyst resection (type 1 and type 2)	1. Whipples surgery 2. Elective liver resection 3. CBD injury 4. Choledochal cyst resection (type 3, type 4 & type 5) 5. All pancreatic surgery (excluding distal pancreatectomy)

TABLE 5: UPPER GASTROINTESTINAL SURGERY

GENERAL SURGEON	SUBSPECIALTY
1. Underrunning of Upper GI bleeding. 2. Repair of Perforated Duodenal/Gastric Ulcer. 3. Open Feeding Gastrostomy. 4. Feeding Jejunostomy. 5. Gastrojejunostomy Bypass Procedure. 6. Open Partial Gastrectomy/Antrectomy for emergency life-threatening condition. 7. Open Pyloroplasty. 8. Open Gastric GIST Resection. 9. Open Partial/Distal Gastrectomy/ Antrectomy* 10. Open Total Gastrectomy* 11. Open Gastric Wedge Resection* 12. Open D2 Subtotal/total Gastrectomy. 13. Bariatric & Metabolic Surgeries.	1. Open/Laparoscopic Radical Distal/ D2 Subtotal Gastrectomy 2. Open/Laparoscopic Radical/ D2 Total Gastrectomy 3. Radical Esophagectomy with 2 or 3 Field Lymphadenectomy for Esophageal Cancer eg. Ivor-Lewis, Thoracoabdominal, McKeown Esophagectomy etc. 4. Esophageal Replacement/ Reconstruction Surgeries eg. Gastric pullthrough, Jejunum or Colonic interposition, Esophageal Repair, Enucleation of Esophageal Smooth Muscle Tumour or Duplication Cyst etc 5. Laparoscopic Anti-reflux & Hiatal Surgeries(full or partial wraps) 6. Surgeries for Esophageal Motility Disorder eg. Laparoscopic Myotomy Cardiomyotomy + Anti-reflux procedure etc. 7. Bariatric & Metabolic Surgeries Eg. Laparoscopic Sleeve Gastrectomy, Laparoscopic RY Gastric Bypass etc. 8. Laparoscopic Gastric GIST Resection

NOTE:
*Subject to the intention to treat. A more radical surgeries and pre-operative oncology management should be performed at subspecialty unit for malignant pathology with potential curative resection.

TABLE 6: THORACIC SURGERY

GENERAL SURGEON	SUBSPECIALTY
1. Emergency Thoracotomy for Massive Hemothorax. 2. VATS/Open Decortication 3. VATS/Open Peripheral Lung Biopsy 4. VATS Sympathectomy	1. VATS/Open Lobectomy 2. VATS/Open Sleeve Lobectomy 3. Pneumonectomy 4. Tracheobronchial/Carinal Resection & Reconstruction 5. VATS/Open Thymectomy 6. VATS/Open Mediastinal mass excision 7. Central Lung Biopsy 8. VATS/Open Ligation of Thoracic Duct 9. Chest Wall Resection &Reconstruction 10. Pleural Window 11. Pericardial Window

TABLE 7 : TRAUMA AND BURN

GENERAL SURGEON	SUBSPECIALTY
1. SSG 2. All live saving procedures in trauma	1. Vascular injury repair

TABLE 8 : PEDIATRIC SURGERY	
GENERAL SURGEON	**SPECIALTY**
1. Herniotomy 2. Orchidectomy 3. Emergency laparotomy 4. Appendicectomy 5. Intussusception	

TABLE 9 : NEUROSURGERY

GENERAL SURGEON	SPECIALTY
1. Emergency craniotomy for subdural & extra-dural haemorrhage. 2. Burr hole. 3. EVD insertion	

TABLE 10 : UROLOGY

GENERAL SURGEON	SPECIALTY
1. Cystoscopy 2. Insertion of ureteric stent 3. Emergency nephrectomy 4. Operation for hydrocele 5. High ligation orchidectomy 6. Orchidopexy 7. Repair of ureteric and bladder injury 8. Vesicolithotomy	

TABLE 11

LIST OF PROCEDURE (MEDICAL OFFICERS)

NO	DURATION OF TRAINING	PROCEDURES
1	PHASE I MEDICAL OFFICER (LESS 6 MONTHS)	- CENTRAL VENOUS LINE INSERTION - CHEST TUBE INSERTION - ENDOTRACHEAL INTUBATION - INCISION AND DRAINAGE OF SUBCUTANEOUS INFECTIONS - TOILET & SUTURING - THRUCUT BIOPSY - SANGSTAKEN BLAKEMORE TUBE INSERTION
2	PHASE II MEDICAL OFFICER (6 – 18 MONTHS)	- SEBACEOUS CYST EXCISION - LIPOMA EXCISION - APPENDICECTOMY - BENIGN BREAST LUMP EXCISION - CIRCUMCISION - INGUINAL HERNIOPLASTY (GA/ REGIONAL/LA) - OPEN & CLOSE ABDOMEN - SAUCERISATION - SECONDARY SUTURING
3	PHASE III MEDICAL OFFICER (18-30 MONTHS)	- LAPARATOMY FOR PERFORATED APPENDICITIS WITH PERITONITIS - LYMPH NODE BIOPSY - ORCHIDECTOMY - JABOULAYS PROCEDURE - PERFORATED GASTRIC ULCER REPAIR - STOMA CREATION - TRACHEOSTOMY - OPEN MAYOS REPAIR

4	PHASE IV MEDICAL OFFICER (>30 MONTHS)	- JEJUNOSTOMY - LAPAROSCOPIC APPENDICECTOMY - SMALL BOWEL RESECTION & ANASTOMOSIS - SPLENECTOMY - HIGH SAPHENOUS VEIN LIGATION & VENOUS STRIPPING (WITH STAB AVULSIONS)

REFERENCES:

1. Speciality and Subspecialty Framework of Ministry of Health Hospitals under 11th Malaysia Plan (2016-2020).MOH/P/PAK/324.16 (bk) *www.moh.gov.my*

2. Guideline of Prioritisation of Cases for Emergency and Elective Surgery in Ministry of Health Malaysia 2018. *www.moh.gov.my*

3. *Polisi Perkhidmatan Rawatan Harian di Hospital-Hospital Kementerian Kesihatan Malaysia 2016*. MOH/P/PAK/316.17 (BP) *www.moh.gov.my (penerbitan_ Perkhidmatan Rawatan Harian_polisi)*

4. Day Care Surgery Standard Operating Procedure 2016. MOH/P/PAK/316.16 (GU). *www.moh.gov.my (penerbitan_Perkhidmatan Rawatan Harian_garispanduan)*

5. Minutes of meeting: *Minit Mesyuarat bagi mesyuarat bertujuan untuk mengoptimakan perkhidmatan dewan bedah di hospital-hospital Kementerian Kesihatan Malaysia.*
Rujukan:KKM.600-27/8/7 (20) 20 September 2016 www.moh.gov.my (penerbitan_bedah am_rujukan)

6. Minutes of meeting: *Mesyuarat Koordinasi Perkhidmatan Pelbagai Disiplin Klinikal Kementerian Kesihatan Malaysia Perkhidmatan Pembedahan Am (Vascular) dan Perkhidmatan Pembedahan Ortopedik- management of peripheral vascular conditions including trauma 14 Oktober 2016. www.moh.gov.my (penerbitan_bedah am_rujukan)*

7. Guidelines on Safe Surgery Saves Lives Programme. Patient Safety Unit Medical Care Quality section, Medical Development Division, Ministry of Health Malaysia 2018. *www.moh.gov.my*

8. *Pemantapan tatacara tugas atas panggilan (ON-CALL) pegawai perubatan pakar di hospital dan institusi perubatan Kementerian Kesihatan Malaysia.* Rujukan; KKM.600-20/2/1(23). *www.moh.gov.my (penerbitan_bedah am_rujukan)*

9. Guideline for Credentialing & Privileging in the Ministry of Health Malaysia. Medical Development Division. December 2001 *www.moh.gov.my*

10. Malaysian Medical Council Guideline: Consent for treatment of patients by registered medical practitioners.[Adopted by the Malaysian Medical Council on 21 June 2016]. First Revision: 19 September 2017.

11. General Hospital Operational Policy. Medical Development Division Ministry of Health Malaysia. MOH/P/PAK/268.13(BP). First Edition August 2013.

12. Directive*: Pekeliling Ketua Pengarah Kesihatan Bil 2/2009. Garispanduan Rujukan dan Perpindahan Pesakit di antara hospital-Hospital Kementerian Kesihatan Malaysia. Bahgian Perkembangan Perubatan. Kementerian Kesihatan Malaysia.* MOH/P/PAK/165.08 (GU) Mei 2009 *www.moh.gov.my (penerbitan _bedah am_rujukan)*

13 Letter: *Arahan Pemantauan Petunjuk Prestasi Utama (KPI) Hospital Performance Indicator for Accountability (HPIA) dan KPI Perkhidmatan Klinikal Bagi Program Perubatan yang telah dikemaskini (Pindaan Januari 2015).* Rujukan: KKM.87/P3/12/6/14 (2).10 Februari 2015. Clinical Audit Unit, Medical Care Quality Section, Medical Development Division, MOH

14. Letter: *Penghasilan Borang-Borang Keizinan yang baru melalui Projek Pembangunan Modul Clinical Documentation (CD).* Rujukan: KKM.100-11/1/67 JLD 2 (1). 18 November 2016. *www.moh.gov.my (penerbitan_ bedah am_rujukan)*

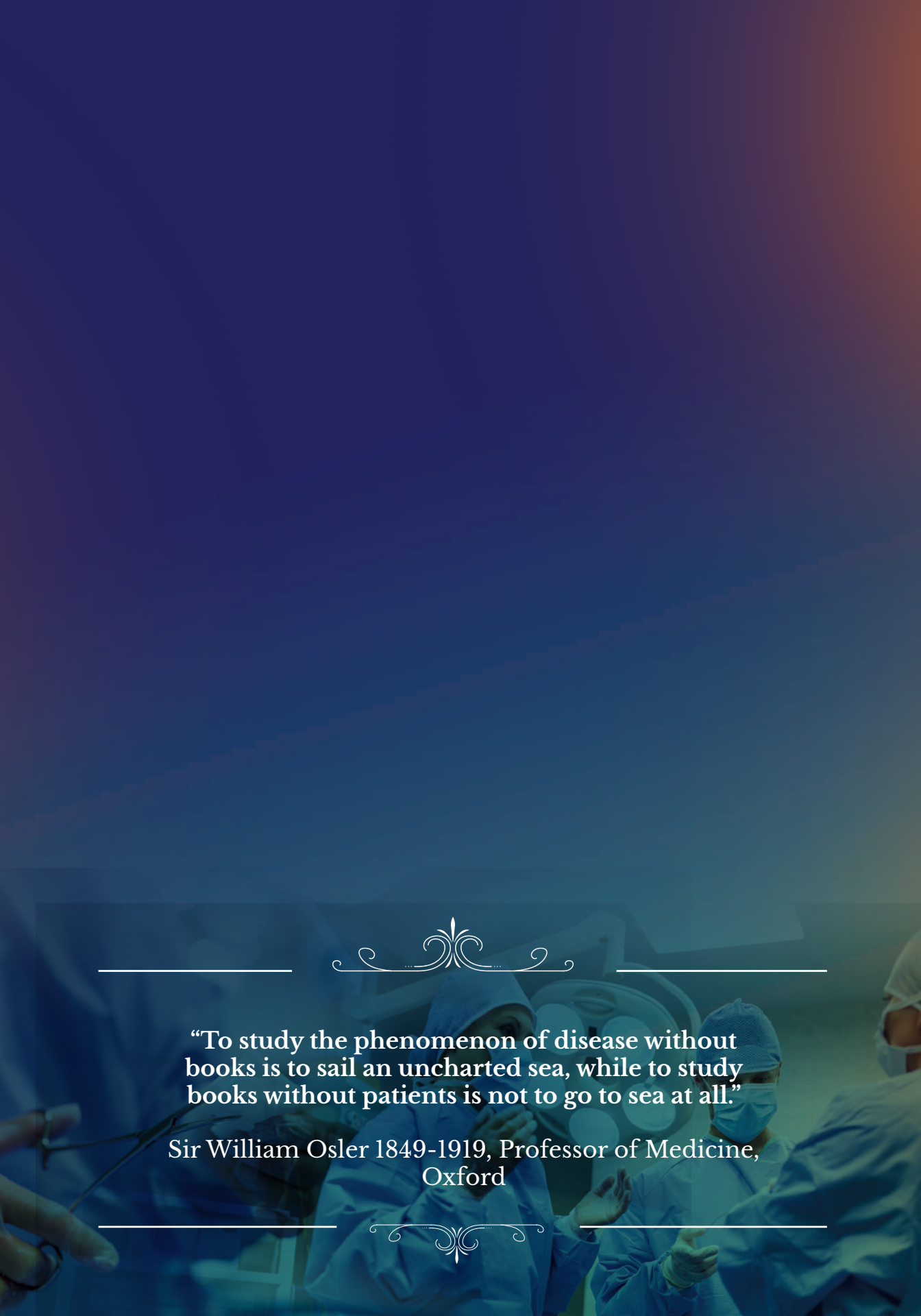
15. Letter: *Penjelasan Lanjut Borang-Borang Keizinana yang baru dari Projek Pembagunan Modul Clinical documentation (CD) Peringkat Kementerian Kesihatan Malaysia.* Rujukan: 100-11/1/67 JLD 2(40). 15 Mac 2017. *www.moh.gov.my (penerbitan_bedah am_rujukan)*

16. Global Surgery 2030: Evidence and solution for achieving Health, welfare, Economic Development was written by The Lancet Commission on Global Surgery, an international multi-disciplinary group of 25 Commissioners, in consultation with collaborators in over 110 countries and all major regions of the world.

LIST OF ABREVIATIONS :

MOH	Ministry of Health
HOD	Head of the Department
WHO	World Health Organization
GSWI	General Surgeon with Interest
TOR	Term of Reference
MO	Medical Officer
MIS	Minimaly Invasive Surgery
CI	Clinical Issues
OGDS	Esophagogastroduodenoscopy
ERCP	Endoscopic Retrograde Cholangiopancreatograp hy
OT	Operation Theater
HPB	Hepatopancreatobiliary
DG	Director General
MMC	Malaysian Medical Council
e – POMR	Electronic Problem Oriented Medical Record
KPI	Key Performance Index
NSR	National Specialist Register
B&E	Breast and Endocrine
HOs	House Officers
MOs	Medical Officers
AMOs	Assistant Medical Officers
GI	Gastro Intestinal
ATLS	Advanced Trauma Life Support
ICU	Intensive Care Unit
NEC	Necrotising Enterocolitis
CHD	Congenital Heart Disease
HKL	Hospital Kuala Lumpur
CT-scan	Computerized tomography scan
EDH	Extra Dural Haemorrhage
SDH	Subdural Hemorrhage
KWSP	Kumpulan Wang Simpanan Pekerja
PERKESO	Pertubuhan Keselamatan Sosial
NRIC	National Registration Identity Card
GIT	Gastro Intestinal Tract
OI	Operational Issues
MDT	Multidisciplinary team
UGI	Upper Gastrointestinal
FIA	Fistula in Ano
GIST	Gastrointestinal Stromal Tumor
CBD	Common Bile Duct
AVF	Arteriovenous Fistula
APR	Abdominoperineal Resection
LAR	Low Anterior Resection
ULAR	Ultra Low Anterior Resection

PPILA	Pan proctocolectomy with ileoanal anastomosis
STARR	Stapled Transanal Resection of the rectum
TEMS	Transanal Endoscopic Micro-surgery
LIFT	Ligation of Intersphincteric Fistula Tract
LD Flap	Latissimus Dorsi flap
VATS	Video Assisted Thoracoscopic Surgery
SSG	Split Skin Grafting
EVD	External Ventricular drain
RLN	Recurrent laryngeal nerve
BCS	Breast Conserving Surgery
AAA	Abdominal aortic aneurysm
CLI	Critical Limb Ischemia
CRC	Colorectal cancer
CME	Continuining Medical Education
NTL	Non-therapeutic laparotomy
PP	Practice Point
PF	Pitfall
AP	Audit Point



“To study the phenomenon of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all.”

Sir William Osler 1849-1919, Professor of Medicine, Oxford

MEDICAL DEVELOPMENT DIVISION
MINISTRY OF HEALTH MALAYSIA
BLOCK E1, PARCEL E,
FEDERAL GOVERNMENT ADMINISTRATIVE CENTRE
62590 PUTRAJAYA
MALAYSIA
TEL: 603 8883888
http://www.moh.gov.my

ISBN 978-967-2173-12-0